

GP 1635

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

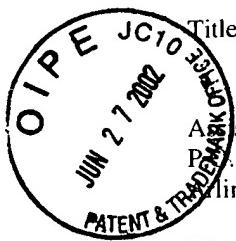
Applicant(s): Eric T. Kool Group Art Unit: 1635

Serial No.: 09/997,931 Examiner: S. McGarry

Filed: 11/30/01 Docket No.: 220.00010150
Conf. No.: 5355

Title: CIRCULAR DNA VECTORS FOR SYNTHESIS OF RNA AND DNA

RECEIVED



Assistant Commissioner for Patents
P.O. Box 2327
Arlington, VA 22202

JUL 01 2002

TECH CENTER 1600/2900

We are transmitting the following documents along with this Transmittal Sheet (which is submitted in triplicate):

- Small entity status is entitled to be asserted in the above-identified application.**
 An itemized return postcard.
 A Petition for Extension of Time for ___ month(s) and a check in the amount of \$___ for the required fee.
 An Information Disclosure Statement (4 pgs); 1449 forms (10 pgs); and copies of 29 documents.
 A check in the amount of \$___, representing _____.
 A certified copy of a ___ application, Serial No. ___, filed _____, the right of priority of which is claimed under 35 U.S.C. §119.
 Other: _____.
 Amendment ___ No Additional fee is required. ___ The fee has been calculated as shown:

Fee Calculation for Claims Pending After Amendment					
	Pending Claims after Amendment (1)	Claims Paid for Earlier (2)	Number of Additional Claims (1-2)	Cost per Additional Claim	Additional Fees Required
Total Claims				x \$9 =	
Independent Claims				x \$42 =	
One or More New Multiple Dependent Claims Presented? If Yes, Add \$140 Here →					
Total Additional Claim Fees Required					

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 13-4895. Triplicate copies of this sheet are enclosed.

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this Transmittal Letter and the paper(s), as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202, on this 24th day of June, 2002.

MUETING, RAASCH & GEBHARDT, P.A.

Customer Number: 26813



26813

PATENT TRADEMARK OFFICE

By: Victoria A. Sandberg
Name: Victoria A. Sandberg
Reg. No.: 41,287
Direct Dial: 612-305-1226
Facsimile: 612-305-1228



PATENT
Docket No. 220.0001 0150

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Eric T. Kool) Group Art Unit: 1635 #7/K.T.
Serial No.: 09/997,931) Examiner: S. McGarry 7/2
Filed: November 30, 2001)
For: CIRCULAR DNA VECTORS FOR SYNTHESIS OF RNA AND DNA I.D.S.

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
P.O. Box 2327
Arlington, VA 22202

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Sir:

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In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with C.F.R. §§ 1.97 *et. seq.*, the materials enclosed herewith are brought to the attention of the Examiner as possibly being of interest in connection with the above-identified patent application. Consideration of each of the documents listed on the attached 1449 forms is respectfully requested. Pursuant to the provisions of M.P.E.P. §609, Applicant further requests that a copy of the 1449 forms, marked as being considered and initialed by the Examiner, be returned with the next Official Communication.

The present application is a continuation-in-part application of co-pending U.S. patent application Serial No. 09/569,344, filed May 11, 2000 (now issued as U.S. Patent No. 6,368,802 on April 9, 2002), which is a continuation application of U.S. patent application Serial No. 08/805,631, filed February 26, 1997 (now issued as U.S. Patent No. 6,096,880 on August 1, 2000), which is a continuation-in-part application of U.S. patent application Serial No. 08/393,439, filed February 23, 1995 (now issued as U.S. Patent No. 5,714,320 on February 3, 1998), which is a continuation-in-part application of U.S. patent application Serial No. 08/047,860, filed April 15, 1993 (now abandoned).

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Applicant(s): Eric T. Kool

Serial No.: 09/997,931

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Filed: November 30, 2001

For: CIRCULAR DNA VECTORS FOR SYNTHESIS OF RNA AND DNA

Pursuant to the provisions of M.P.E.P. § 609 and in accordance with 37 C.F.R. § 1.98(d), Applicant has not included copies of the documents listed on the 1449 forms which were previously cited by or submitted to the Patent Office in the prior applications identified herein. A copy of the below listed documents are provided herewith as they were not of record in any of the prior applications.

List of Documents, Copies of Which are Listed on 1449 Forms and Provided Herewith

Document	Date	Name/Country
6,077,668	06/20/00	Kool
6,096,880	08/01/00	Kool
6,368,802	04/09/02	Kool
WO 96/00795	01/11/96	PCT
WO 97/19193	05/29/97	PCT
WO 97/20948	06/12/97	PCT
WO 97/43298	11/20/97	PCT
WO 98/04746	02/05/98	PCT
WO 99/09216	02/25/99	PCT
Ali et al., "Enzymatic synthesis of DNA probes complementary to a human variable number tandem repeat locus," 179(2):280-283 (June 1, 1989).		
Beaucage et al., "The Functionalization of Oligonucleotides Via Phosphoramidite Derivatives," <i>Tetrahedron</i> , 49(10):1925-1963 (1993).		
Bledsoe et al., "Molecular homology and DNA hybridization," <i>J. Mol. Evol.</i> , 30(5):425-433 (May 1990).		
Egholm et al., "PNA hybridizes to complementary oligonucleotides obeying the Watson-Crick hydrogen-bonding rules," <i>Nature</i> , 365(6446):566-568 (Oct. 7, 1993).		
Elroy-Stein et al., "Cytoplasmic expression system based on constitutive synthesis of bacteriophage T7 RNA polymerase in mammalian cells," <i>Proc. Natl. Acad. Sci. USA</i> , 87:6743-6747 (Sept. 1990).		
Horn et al., "The Synthesis of Branched Oligonucleotides as Signal Amplification Multimers for Use in Nucleic Acid Assays," <i>Nucleosides & Nucleotides</i> , 8(5&6):875-877 (1989).		

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Serial No.: 09/997,931

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It is believed that no fee is due, as this Information Disclosure Statement is filed prior to the receipt of any Action on the merits. However, in the event a fee is due, please charge any fee or credit any overpayment to Account No. 13-4895.

The Examiner is invited to contact Applicant's Representatives at the below-listed telephone number, if they can be of any assistance during prosecution of the present application.

CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper is being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202, on this 24th day of June, 2002.


Victoria A. Sandberg

Respectfully submitted for

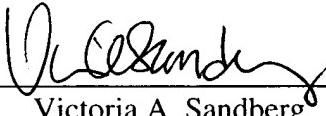
Eric T. Kool

By
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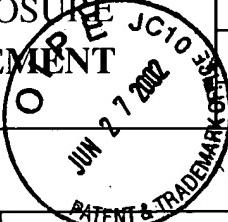
**26813**

PATENT TRADEMARK OFFICE

June 24, 2002
Date

By: 
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		Conf. No.: 5355
	Applicant(s): Eric T. Kool	
	Filing Date: 11/30/01	Group: 1635

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date If Appropriate
	4,795,700	01/03/89	Dervan et al.			
	4,837,312	06/06/89	Dervan et al.			
	4,987,071	01/22/91	Cech et al.			
	5,093,246	03/03/92	Cech et al.			
	5,246,921	09/21/93	Reddy et al.			
	5,258,506	11/02/93	Urdea et al.			
	5,354,668	10/11/94	Auerbach			
	5,354,855	10/11/94	Cech et al.			
	5,426,180	06/20/95	Kool			
	5,470,724	11/28/95	Ahern			
	5,498,531	03/12/96	Jarrell			
	5,500,357	03/19/96	Taira et al.			
	5,648,245	07/15/97	Fire et al.			
	5,714,320	02/03/98	Kool			
	6,077,668	06/20/00	Kool			
	6,096,880	08/01/00	Kool			
	6,368,802	04/09/02	Kool			

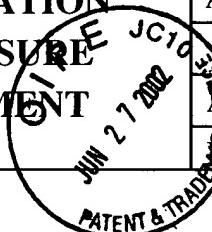
FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	SubClass	Translation	
						Yes	No
	JP 4-262799	09/18/92	Japan (and English Abstract)				X
	JP 4-304900	10/28/92	Japan			X	
	JP 5-146299	06/15/93	Japan			X	
	WO 92/01813	02/06/92	PCT				
	WO 92/17484	10/15/92	PCT				
	WO 94/03630	02/17/94	PCT				
	WO 96/00795	01/11/96	PCT				
	WO 96/33207	10/24/96	PCT				
	WO 97/19193	5/29/97	PCT				

EXAMINER	Date Considered
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*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	WO 97/20948	6/12/97	PCT				
	WO 97/43298	11/20/97	PCT				
	WO 98/04746	02/05/98	PCT				
	WO 98/38300	09/03/98	PCT				
	WO 99/09216	02/25/99	PCT				

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

		"Affinity Chromatography: Practical and Theoretical Aspects," Mohr, Ed., Dekker Publishing: New York, Title page, Copyright page, and Contents pages (pp. v-viii) (1985).
		Agrawal, "Antisense Oligonucleotides: Towards Clinical Trials," <i>TIBTECH</i> , 14:376-387 (1996).
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		Aiyar et al., "A Mismatch Bubble in Double-stranded DNA Suffices to Direct Precise Transcription Initiation by <i>Escherichia coli</i> RNA Polymerase," <i>J. Biol. Chem.</i> , 269:13179-13184 (1994).
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JUN 21 2002
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JUN 21 2002

	D'Souza et al., "Strong Binding of Single-stranded DNA by Stem-Loop Oligonucleotides," <i>J. Biomolecular Structure and Dynamics</i> , 10(1):141-152 (1992).
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PATENT & TRADEMARK OFFICE

	Guy-Caffey et al., "Novel Polyaminolipids Enhance the Cellular Uptake of Oligonucleotides," <i>J. Biol. Chem.</i> , 270(52):31391-31396 (1995).
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	Koo et al., "Determination of the Extent of DNA Bending by an Adenine-Thymine Tract," <i>Biochemistry</i> , 29:4227-4234 (1990).
	Kool et al., "Abstract of National Institute of General Medical Sciences Grant No. 5R01-GM46625-06," titled "Binding of HIV 1 Sequences by Cyclic Oligonucleotides," (funded in Fiscal Year 1997).

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**INFORMATION
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STATEMENT**

Atty. Docket No.: 220.00010150

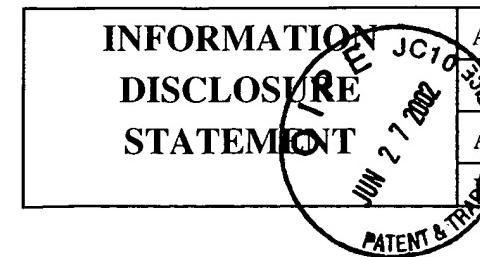
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		Kool, "Circular Oligonucleotides: New Concepts in Oligonucleotide Design," <i>Annu. Rev. Biophys. Biomol. Struct.</i> , 25:1-28 (1996).
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		Kornberg, DNA Replication, W.H. Freeman & Co., San Francisco, 569 (1980).
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